

BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D.C. 20554

RECEIVED

DOCKET FILE COPY ORIGINAL

JUN 30 1967

IN THE MATTER OF:

AMENDMENT OF PART 97 OF THE
COMMISSION'S RULES CONCERNING
MESSAGE FORWARDING SYSTEMS IN
THE AMATEUR SERVICE.

PR DOCKET NR 93-85

MAIL BRANCH

RM-7649, RM-7669, RM-7675
RM-7676, RM-7681, RM-7904

COMMENTS OF
LEE SUTHERLAND PARR

I AM AN AMATEUR ADVANCED CLASS OPERATOR (W3FNU) OF LONG STANDING AS WELL AS A HOLDER OF A COMMISSION GENERAL RADIO TELEPHONE LICENSE (THE FORMER RADIOTELEPHONE FIRST CLASS).

THE COMMISSION'S PROPOSAL IN THIS MATTER SHOWS THE RIGHT SPIRIT BUT IT FAILS TO RECOGNIZE WHAT IT ACKNOWLEDGES IN PARAGRAPH SEVEN OF THE NOTICE, THAT THIS IS AN AUTOMATIC AND HIGH SPEED SYSTEM. HUMAN INTERVENTION NOT ONLY SLOWS DOWN THE OPERATION, IT ALSO INTRODUCES A GREATER CHANCE OF ERROR OR FAILURE IN THE PASSAGE OF THE TRAFFIC.

ONCE-UPON-A-TIME HUMAN OPERATORS COPIED AND RELAYED MESSAGES BY HAND. THE OPERATOR WOULD COPY THE ENTIRE MESSAGE AND THEN HE WOULD DECIDE HOW BEST TO FORWARD IT. THEN HE WOULD RETRANSMIT IT BY HAND IN ITS ENTIRETY. NOW, IN THE MODERN "PACKET" SYSTEM MESSAGES ARE TRANSMITTED NOT IN THEIR ENTIRETY BUT IN SMALL PACKETS. EACH LINE OF THIS PAPER WOULD BE TRANSMITTED SEPERATELY, LINE-BY-LINE. WE WOULD SEND SOME SIXTY PACKETS TO MAKE UP THIS PAGE (EVEN THE PAGE NUMBER AT THE BOTTOM OF THE PAGE WOULD HAVE ITS OWN "PACKET"). EACH OF THESE ONE LINE PACKETS (A PACKET MAY NOT BE MORE THAN 128 CHARACTERS IN LENGTH) WOULD BE INTERLEAVED WITH THE PACKETS OF OTHER MESSAGES AS IT TRAVELS ALONG THE TRANSMISSION PATH. THE ADDRESS AND SENDING STATION INFORMATION IN THE "HEADER" OF EACH PACKET ALLOWS REASSEMBLY AT THE ADDRESSED STATION.

JUST TO MAKE LIFE MORE INTERESTING THE PACKET REPEATER OR "DIGIPEATER" DOES NOT WAIT FOR THE ENTIRE MESSAGE BEFORE RETRANSMITTING THE INDIVIDUAL PACKET. AS SOON AS A PACKET IS CORRECTLY RECEIVED A DECISION IS MADE TO RETRANSMIT THE PACKET ON THAT CHANNEL OR SOME OTHER CHANNEL (LOCAL NETS WILL FREQUENTLY OPERATE IN THE 145 MHZ. BAND WHILE "BACKBONE" LONG DISTANCE ROUTE WILL FREQUENTLY BE FOUND ON THE 220 AND 440 MHZ. BANDS). THUS, A SUBSTANTIAL PORTION OF THE MESSAGE MAY HAVE BEEN TRANSMITTED BEFORE THE REPEATER OPERATOR HAS ANY POSSIBILITY OF DETERMINING THE FULL IMPORT OF THE MESSAGE. AND, THE SYSTEM IS STRUCTURED TO DEPEND UPON THE PROMPT (INSTANT, EVEN!) RETRANSMISSION OF THE RECEIVED PACKET; FOR IF THE ORIGINATING STATION DOES NOT RECEIVE AN ACKNOWLEDGEMENT OF CORRECT RECEIPT FROM THE DESTINATION STATION WITHIN A FEW SECONDS IT WILL RETRANSMIT THE PACKET OVER-AND-OVER AGAIN UNTIL IT DOES RECEIVE THE ACKNOWLEDGMENT OF CORRECT RECEIPT. IF YOU WATCH THE TRAFFIC PASSING THROUGH A REPEATER YOU WILL SEE ONE LINE OF A MESSAGE REPEATED SEVERAL TIMES INTERSPERSED WITH ASSORTED LINES OF OTHER MESSAGES AND "OVERHEAD" TRAFFIC SUCH AS THE ACKNOWLEDGEMENTS BEING RETURNED TO THE ORIGINATING STATION.

No. of Copies rec'd 249
List ABCDE

WHAT ALL OF THE ABOVE AMOUNTS TO IS THIS: ANY HUMAN CHECKING OF